

**State of Vermont
Joint Fiscal Office**

**Independent Review
of
State Information Technology Projects,
Operations, and Organizations
(Act 74 of 2021, Sec. E.127.1)**

DMV Core System Modernization

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A. Executive Summary

The Department of Motor Vehicles (DMV) seeks funding to implement a new information system. This project is named the DMV Core System Modernization (DS-VS system). There are two phases:

- **Phase 1** (funded via FY22 Big Bill – 2021 Acts and Resolves No. 74, Sec. G.501(a)(1)) will implement Vehicle Services (VS), which includes titling, registration, and other customer-facing eServices.
- **Phase 2** (funding requested in FY23 Governor Recommend budget request) will implement driver's services (DS), including driver's licenses and other identification, customer-facing eServices, and other supporting functions.

I recommend this project be approved, and this document lays out the evidence supporting this conclusion.

Summary of Findings

1. The existing processes delivering VS/DS consist of a 50-year-old mainframe, 20 desktop databases, and disjointed manual processes. As such, it is easy to justify replacing the current system with a modern, secure information system.
2. The State seeks to implement the same system that has been successfully implemented in 17 other states and will not seek customizations from the vendor. This vendor has also successfully implemented a commercial vehicle system at the Vermont DMV and successfully implemented a tax system for the Vermont Department of Taxes.
3. Commissioner Minoli identifies this project as transformational, and a key challenge will be to document the new business processes and ensure staff are adequately trained, classified, and prepared to perform their new roles.
4. The costs of this project are comparable to implementations of the same product in other states. Total management and operations (M&O) costs are over five years.

Total implementation costs:	\$ 56,764,670
Total management and operations costs:	<u>\$ 45,387,173</u>
Total:	\$102,151,843
5. Due to the lack of competitive bid for this project, no additional cost comparisons from different vendors are available for comparison. For more information on why a competitive bid was not done for this project, see section F "Additional Information."
6. See section G "Risks Informing Future Reviews" for information about risks associated with this implementation.

B. Ratings by Review Area

Overall status: (Does evidence point to a well-developed plan that will set the project up for success?)



The vendor has a successful track record of implementing the VS/CS system in 17 states. The State is committed to following the same process as these other states for the VT implementation.

1. Project Justification: (Why are we doing this? Is the project necessary and beneficial?)



The existing processes delivering VS/DS consist of a 50-year-old mainframe, desktop databases, and manual processes. It is easy to justify replacing the current system with a modern, secure information system.

2. Clarity of Purpose: (Is there a clear definition of success? Is the scope of work complete?)



The State has concluded the vendor's VS/DS contains the functionality needed to replace the mainframe, databases, and manual processes currently delivering these services.

3. Organizational support: (Is the organization ready to undertake this project? Has the potential need for business process change been acknowledged, and is there a change management plan?)



All indicators from discussions with Commissioner Minoli point to a strong level of support. This rating reflects the early stage of the project and the fact that actual work plans with resources have not been developed. This will be updated during the next review.

4. Project Leadership: (Has a qualified person been designated to lead the project, and has that person been empowered to do so?)



Project leadership is qualified and empowered by DMV leadership.

5. Project Management: (Is the project management staff appropriate, and will project management conform to State of Vermont standards?)



A qualified State PM has been assigned to the project. The project will be monitored by ADS EPMO.

6. Financial Considerations: (How much will it cost to complete the project, how much will it cost to maintain and operate the system, and how will it all be paid for?)



The cost of this project is comparable to implementations of the same products in other states.

7. Technical Approach: (Is the proposed solution achievable, realistic, and appropriate?)



The technical approach derived from available documents appears sound and appropriate.

C. Review Process

This analysis was conducted using the existing methodology for an IT project review on behalf of the Joint Fiscal Office (JFO) and the Vermont Legislature. The project review focused on seven key subject areas:

1. Project Justification
 - Does the project really need to be done?
2. Clarity of Purpose
 - Is there a clear definition of success so that all participants know when the project is properly completed?
3. Organizational Support
 - Is the affected organizational entity ("the business") fully supportive of the project, and is the business willing and able to adapt where required?
4. Project Leadership
 - Will there be strong and effective leadership to guide the project?
5. Project Management
 - Will there be qualified and effective project management to assist project leadership?
6. Financial Considerations
 - Are costs through the system lifecycle properly estimated, and is there funding?
7. Technical Approach
 - Are the proposed technical solutions achievable, realistic, and appropriate for this project?

Projects are reviewed using available information based on the project's current phase. The Agency of Digital Services (ADS) indicates this project is at the planning stage. (See Appendix 1 for a description of the phases of a project.) Typically, a vendor is not identified until a contract is signed, so I will not name the vendor in this document.

The information analyzed for this review was gathered from the following sources:

- Documentation from the Enterprise Project Management Office ADS. (See Appendix 3 for a listing of EMPO documentation by project phase.)
- Conversations, e-mails, and testimony with the Commissioner of DMV, Wanda Minoli.
- Conversations and e-mails with the ADS Secretary, John Quinn.
- Testimony provided by Commissioner Minoli to House Committee on Transportation
- E-mails and discussions with other ADS staff.
- The independent review for this project.
- Conversation with Doug Rowe of BerryDunn to confirm my understanding of specific sections of the independent review.

Note: In this document, the term "independent review" refers to a review described in 3 VSA § 3303(d). This is a requirement for ADS to obtain independent expert review of any new information technology projects with a total cost of \$1,000,000.00 or greater or when required

by the Chief Information Officer. This independent review has a different scope than the JFO IT Review and it is conducted by a vendor selected by ADS.

D. Project Description

The Department of Motor Vehicles (DMV) seeks funding to implement a new information system to collect, process, and store information required for vehicle and driver services. This project is named the DMV Core System Modernization (DS-VS system). The vendor will implement this project over two phases.

- **Phase 1** (funded via FY22 Big Bill – 2021 Acts and Resolves No. 74, Sec. G.501(a)(1)) includes vehicle services, which include titling, registration, renewals, impound records, dealer licensing and regulation, plates and decals, and customer-facing eServices.
- **Phase 2** (funding requested in FY23 Governor Recommend budget request) includes drivers services (DS), which include driver's licenses and other identification, customer-facing eServices and support fraud detection, investigation, hearings, scheduling, management, financial responsibilities of admin, and reporting of driver restrictions, convictions, improvement/control information.¹

E. Assessment by Project Review Area

1. Project Justification

The DMV currently uses the DMV Mainframe (approximately 50 years old), 20 Microsoft (MS) Access databases (some are very old MS Access 97), and manual processes to execute the functions of vehicle and driver services. These processes require entering the same information into different systems (such as a title, registration, etc.) as the task moves through the approval process. These processes are time-consuming and require numerous touchpoints, resulting in a lag time of weeks from start to finish. The manual processes and lack of modern quality control increase the likelihood that incorrect data will enter the system.

In addition, the DMV has a point-of-sale system where dealerships enter information via an interface that inputs data into the DMV mainframe. According to the independent review:

"The mainframe, supporting databases, and some supporting systems are unstable, difficult to change/update to accommodate the DMV's modernization initiatives, and vulnerable to security threats."²

This data is then re-entered into other systems that feed the multistep process that includes reviews, and then the data is again re-entered – as the reviews and approvals work their way through the existing processes.

Assessment of Project Justification

The age and risk presented by the current DMV mainframe and the interface represent sufficient justification for the DMV Core System Modernization. The disjointed chain of manual processes, combined with re-entering the same information into different databases as the various processes work their way through the chain of approval steps, further justifies the project.

The current system has limited quality control mechanisms. Many of the processes that take weeks to complete could be processed in real-time with a modern system.

As stated in the independent review:

*"The new DS-VS is expected to help the State increase business process efficiencies, reduce duplicate data entry, increase online transactions, reduce the risk of system failure, improve financial reporting, and meet the state's goal of implementing a cloud-hosted system. These intangible benefits (i.e., the benefits that cannot be easily quantified at the time of writing this report) outweigh the tangible costs of implementing and supporting a new DS-VS."*³

Summary: The current VS/DS processing consisting of the old mainframe, desktop databases, and manual processes should be replaced by a modern, secure information system.

2. Clarity of Purpose

The State's project objectives are as follows:

- *contribute to the State's strategic goal to automate public-facing processes;*
- *provide an improved self-service web portal for use by business and individual customers through which they may review their account, submit and complete various VS transactions, and communicate with the DMV;*
- *reduce human error in current business processes by reducing manual data entry, especially duplicate manual data entry, in multiple systems;*

- *properly update national databases and credentials, thus minimizing incorrect citizen record information;*
- *support accurate revenue collection, accounting, and reporting, which will result in fewer financial corrections, quicker financial reconciliation, and successful audits;*
- *reduce technical debt by moving to single, vendor-hosted systems; and*
- *ensure various requirements are met, including verifying the existence of title brands on titles received from other jurisdictions, updating the National Motor Vehicle Title Information System (NMVTIS) as mandated by federal regulations, and collecting odometer disclosure statements required by federal regulations.⁴*

During conversations with DMV Commissioner Minoli, she stated that the vendor solution for VS/DS meets the DMV Core System Modernization requirements. The selected VS/DS system has been implemented successfully in 17 states—on time and on budget. Commissioner Minoli stated that she intends to follow the same vendor implementation methodology used in these states to achieve the same results for Vermont.

It is important to note Commissioner Minoli's optimism is grounded in DMV's previous success with this vendor. DMV has worked with this vendor on the successful Commercial Vehicle Operations (CVO) System implementation in 2019. The Vermont Department of Taxes also successfully implemented this vendor's GenTax solution in a project that started in 2014.

Although skeptical of the vendor's implementation approach at the beginning of the Commercial Vehicle Operations project, she was satisfied with the resulting system and the new streamlined business processes. This experience, along with the vendor's success in implementing the VS/DS solution in 17 other states, drives her optimism for the VS/DS implementation. She believes this project will be a transformational improvement in how the DMV serves Vermonters.

Assessment of Clarity of Purpose

The State has clear project objectives aligned with success criteria.

The scope of work for the VS portion of this project was available and analyzed for this review and the independent review. The VS statement of work was thorough in scope, and the timeframe for the implementation is reasonable. Because the State decided to include both project phases in one contract at a late stage, the statement of work for the phase 2 DS project was unavailable for this or independent review. Given the successful track record of this vendor in two other projects in Vermont, and the successful implementations of this product in 17 different states, the independent reviewer is comfortable recommending that the project proceed.

Summary: The State has concluded the vendor's VS/DS contains the functionality needed to replace the mainframe, databases, and manual processes currently delivering these services. The State is committed to implementing the VS/DS system using the same process that has been successfully implemented in 17 states by this vendor. The implementation of the new system will transform how the DMV operates.

3. Organizational Support

There is evidence of organizational support for this project. Commissioner Minoli is deeply involved in the project and could speak to the vendor's implementation methodology in detail. She sees this as a transformational project for DMV and spoke of the work DMV leadership has done to prepare the organization for the implementation. They have identified key staff to fill project team roles and have started to reclassify staff positions to reflect the changes in day-to-day operations.

Project stakeholders are identified and included in ADS documentation. During the conversations with Commissioner Minoli, I asked her about how she would include external stakeholders in the project, specifically, the Vermont Dealers and Automotive Distributors Association (VADA). VADA is the professional association of businesses using the point-of-sale system. Commissioner Minoli said she considers VADA a crucial partner in this project. She said VADA had received communications about the project. She said the project team would not only consult VADA members but would monitor participation to ensure there was sufficient representation from big, small, franchised, and independent businesses from the VADA membership. This inclusion of external stakeholders is an example of using change management principles to increase the likelihood of a smooth implementation.

Change management is a highly structured approach for managing the people side of change. The use of formal change management in a project indicates positive organizational support. A change management framework uses communications to ensure stakeholders are informed and included in conversations about projects.

Currently, the vendor implementation methodology outlined in the VS statement of work includes references to an organizational change management plan but does not specify the components included in the plan.

Information about training related to the new system was not included in the documentation provided for this review.

Assessment of Organizational Support

The State understands that adopting the processes developed by the vendor and implemented across 17 states is critical to a successful implementation.

The State has identified 40 internal stakeholders across the DMV programs and IT staff. The State acknowledges the importance of getting input and informing external stakeholders, such as VADA. Currently, VADA is not included in the ADS stakeholder document, and I suggest these stakeholders be added to the stakeholder lists so they are included in processes and communications.

According to Commissioner Minoli, this project is transformational, and one of the key challenges will be to document the new business processes for the DMV and make sure staff are adequately trained, classified, and prepared to perform their new roles.

Summary: There is a strong indication that there is organizational support to implement the new system, there is leadership, and the project team adheres to the vendor's standard VS/DS implementation. However, the level of support is difficult to assess at this stage of the project because the project plan has not been developed, and resources are not assigned to tasks. Commissioner Minoli is correct in her assessment that this project is transformational, and one of the key challenges will be to document the new business processes for the DMV and make sure staff are adequately trained, classified, and prepared to perform their new roles.

4. Project Leadership

The stakeholder identification list includes Commissioner Minoli as Executive Sponsor and Deputy Commissioner Michael Smith as Sponsor. Project sponsors approve and support the project goals, allocate resources, and monitor progress. Project leaders assume active responsibility and accountability for success.

The project leaders for this project have been named. Jordan Villa, Project Coordinator, will serve as Business Lead, and the Project Manager will be Kelly Nolan. The project team includes five designated members across IT and programs and currently unnamed DMV Subject Matter Experts.

As outlined in the ADS Project Charter, the Executive Steering Committee is responsible for strategic decision-making. The members of this committee include the following:

- Project Sponsor;
- Business Lead (nonvoting);

- FAST Project Director (nonvoting);
- department executives that report directly to the Executive Steering Committee; and
- others as mutually agreed (nonvoting).

Assessment of Project Leadership

The project leaders are empowered to make day-to-day business decisions during the project implementation. Commissioner Minoli and Deputy Commissioner Smith, serving in the Executive Sponsor and Sponsor support of the project leaders, will set the tone and the example of how DMV staff support and respond to the project team as they work through the implementation.

Summary: Project leadership is qualified and empowered by DMV leadership.

5. Project Management

An ADS Project Manager (PM) has been assigned to this project. The selected PM is Kelly Nolan, who has extensive experience working with the State of Vermont.

The VS/DS project vendor utilizes a hybrid project management approach. During the Commercial Vehicles Operations project, the State successfully aligned its methodology with the vendor's hybrid methodology and State project management approach. The State intends to use the same process with the DS-VS implementation.⁵

Assessment of Project Management

A qualified Project Manager has been selected. This Project Manager will work with the business lead and the vendor project manager to ensure that the project management methodologies are aligned, and the State PM can report status updates to the State dashboard.

Summary: A qualified State Project Manager has been assigned to the project. Because the vendor uses a hybrid project management approach, the State Project Manager will ensure the State and vendor methodologies are aligned. This approach was used successfully in the Commercial Vehicles Operations project.

6. Financial Considerations

The following budget information is from an ADS Life-Cycle-Cost-Analysis spreadsheet dated January 11, 2022. This spreadsheet is the latest and best estimate for the VS/DS implementation cost and management and operations (M&O) costs for five years.

Implementation Costs	
FY22	\$ 6,496,106
FY23	\$ 16,136,430
FY24	\$ 20,362,234
FY25*	\$ 13,769,900
Total	\$ 56,764,670

Management and Operations (M&O) Costs	
FY25	\$ 8,780,690
FY26	\$ 8,886,950
FY27	\$ 9,037,552
FY28	\$ 9,235,936
FY29	\$ 9,446,045
Total	\$ 45,387,173

GRAND TOTAL	\$ 102,151,843
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*The ADS Life-Cycle-Cost-Analysis included FY25 implementation costs in the FY25 M&O costs. These dollars have included these costs as an FY25 implementation costs table for consistency.

Because a competitive bid process was not conducted for this project, the independent reviewer compared the Vermont costs to costs paid by Michigan and Minnesota for implementations of the same vendor's VS and VS/DS solutions.⁶ (See section F for more information on why a competitive bid was not conducted.)

The independent reviewer found the costs of the projects in both states to be comparable to the projected Vermont costs.

Assessment of Financial Considerations

The costs of this project are comparable to implementations of the same vendor products in other states.

Because a competitive bid process was not used for this project, there are no cost comparisons from other comparable vendor solutions.

Summary: The costs of this project are comparable to implementations of the same products in other states. Due to the lack of competitive bid for this project, no additional cost comparisons from different vendors are available for comparison.

7. Technical Approach

The competitive review process results in the creation of a statement of work, technical architecture, and other documents. Because there was no competitive bid for this project, there is no technical architecture information to review. The independent reviewer noted the same issue but found this to not be a risk because of the following:

[Vendor] DS-VS has been implemented in numerous states, including Massachusetts, Nebraska, North Dakota, Oregon, and Washington. Implementations range from VS to the combined DS-VS. FAST has also implemented its GenTax system for Vermont's Department of Taxes and has implemented its Commercial Vehicles Operations system within the DMV."

Vendor "intends to host DS-VS in the cloud, as long as the state is successful in amending the Master Agreement prior to project start. This aligns with the state's principal of leveraging shared services and cloud-based IT to take advantage of economies of scale."⁷

The independent review identified 16 system integrations for the VS project. Because the statement of work for DS was unavailable for this review, the integration points for the DS part of the project were not identified. In subsequent reviews, the status of all integration points will be examined.

Assessment of Technical Approach

The competitive bid process is the source of many of the documents needed to do a complete review. Because of the lack of a competitive bid process, system integrations for DS and the

technical architecture were unavailable to inform this review and the independent review conducted by BerryDunn. Although this is a definite shortcoming, I agree with the independent reviewer that this presents little risk because of the following:

- Implementations of the VS and DS products have been successful in multiple states.
- ADS includes language ensuring technical standards as standard language in contracts.
- This vendor has implemented two other systems with Vermont, which adhere to State standards.

The independent review included an assessment of adherence to technical, security, accessibility, and support standards, leaving no concerns with the technical approach.

Summary: The statement of work for the DS phase of the project and the proposed technical architecture were not available for this review or the independent review conducted by BerryDunn. But Vermont's contracting standards and the vendor's existing Vermont system implementations adhere to Vermont standards, so I believe this presents little risk to the success of this project.

F. Additional Information

Why was a competitive bid not done for this project?

The products chosen for the VS/DS implementation will be purchased from a master contract (#63) the State has with this vendor. This master contract was put in place in 2019 when the DMV via ADS received a waiver to implement the vendor product called GenTax. The Secretary of Administration granted this waiver because this product was in use by the Department of Taxes, and a competitive bid process initiated the original project. When the master contract was created, the vendor's other products were also listed on the master contract, although the waiver language referred only to the vendor's GenTax product. Because of this, the vendor's VS and DS products are listed on that master contract, and therefore, there was no competitive bid or further waivers required for this project.

My interest in this issue is multilayered. First, the actual development of the RFP is an important process in the project lifecycle. It requires the business and IT staff to come together and create a comprehensive vision for exactly what the desired information system will accomplish and what standards it must meet. Not only does this process identify requirements and help ensure explicit contract language, but it's also an embedded change management activity that allows stakeholders to coalesce around a project.

Using a master contract enables the State to achieve an economy of scale and reduce the number of systems it is required to support. However, a process is still needed to identify the alignment of a solution to the needs of each implementation, much like an RFP process would.

Whether a competitive bid process is used or waived, certain information is needed by the independent reviewer to assess and mitigate risks posed by a product. The independent review process *consistently* identifies risks during project reviews. The State then mitigates the risk by doing more work, adding more precise language to the contract, or negotiating contract terms it hadn't considered—because the independent review is completed before the contract is finalized.

This project had the benefit of a vendor who has had two successful implementations with Vermont and 17 successful implementations of VS/DS products with other states and the commitment of DMV leadership to stick to the framework already developed by the vendor.

If other products on the master contract do not have a similar set of conditions, then another means of illustrating the alignment of the product with State requirements will be needed to inform independent reviews and JFO reviews.

G. Risks Informing Future Reviews

General Areas to Monitor

1. Are milestone dates being met?
2. Is the project adequately staffed?
3. Has the State team identified any function or process that cannot be achieved using the system? If so, what was the outcome? Did they eliminate the function/process or find a workaround?
4. Have there been any change orders?

Stakeholder Engagement

Review how the State team has engaged VADA members in the project.

Data Migration/Data Conversion (AKA Extract Transform Load)

This project will require a complex data migration and data conversion process. This is called an Extract, Transform, and Load (ETL) process in technical terms. Data migration refers to moving data from one system to another (Extract and Load). Data conversion refers to making changes to the data while moving it into a new system (Transform). I will be monitoring this process in future reviews because it has been known to cause considerable difficulties if not planned properly. (See Appendix 4 for detailed examples of this issue.)

Integration Points

The independent review identified 16 system integrations for the VS project. Because the statement of work for DS was not available at the time of this review, the integration points for that part of the project were not identified. In subsequent reviews, the status of all integration points will be reviewed. The implementation plan must also address how VISION (current State financial system) integration points are coordinated with the planned migration of VISION PeopleSoft to WorkDay Financial Management Module.

H. Conclusion

This project is recommended for approval. The current system should be replaced with a modern, secure information system. The proposed vendor has also successfully implemented this same system in other states and Commissioner Minoli is committed to implement this system with no Vermont specific customizations. This project will be transformational for the Department, and a key challenge will be to document the new business processes and ensure staff are adequately trained, classified, and prepared to perform their new roles.

Appendix 1: Phases of a Project

Initiating Phase: During this phase, the project is proposed, initially defined, and approved. The Initiating Phase is considered complete when a Project Charter has been accepted that defines what is going to be accomplished, why it is necessary, when it is going to be completed, and who is responsible and accountable for the project's success.

Planning Phase: In the planning phase, the groundwork is laid for the executing phase. This includes developing project plans and defining the specifics of scope, requirements, schedule, and cost. The procurement process is started (RFPs), and risk management is planned. Communications between stakeholders (status reports, etc.) are established.

Executing Phase: During this phase, the actual work required to meet project goals is performed in accordance with the project plans. This includes the execution of contracts, the performance of project work, and the management of communications between project participants and stakeholders.

Closing Phase: In the closing phase, the project is determined to be complete, and for most projects, the transition is made from a project mode to an operations mode. Procurements are closed, project teams are released to other tasks, and lessons learned are documented.

Throughout: During all phases, the project team monitors project status and controls scope, schedule, work, costs, quality, communications, risks, procurements, and stakeholder engagement.

Appendix 2: JFO IT Project Review Areas

The JFO review areas with high-level questions are as follows:

1. Project justification - Is the project justified?
2. Clarity of purpose - Is the definition of success established and realistic?
3. Organizational Support - Does the business fully support the project?
4. Project leadership - Is there strong and effective leadership?
5. Project management - Is there a plan for effective project management?
6. Financial considerations - Is funding secure and sufficient for the anticipated life of the system?
7. Technical approach - Is the project technically feasible, and is the proposed technical approach the right one?
8. Risk management - Are the major project risks identified and properly mitigated?

Appendix 3: EMPO Documentation by Project Phase

Phase 1: Exploration

- Initial project backlog
- Request for Information (RFI)
- IT Business Case/Cost Analysis (IT ABC form)
- Finance codes

Phase 2: Initiation

- Stakeholder List
- Project charter
- Prioritized product backlog
- Release plan roadmap

Phase 3: Planning

- RFP
- Independent Review Report (for projects >\$1 million in lifecycle costs)
- Contract
- Updated IT ABC form

Phase 4: Execution

- Release schedule
- Product backlog
- Sprint backlog
- Product

Closing Phase

- Deliverables acceptance
- Lessons Learned
- Final IT ABC Form

Appendix 4: Data Conversion and Migration (AKA ETL) Risks Described

ETL stands for Extract, Transform, and Load.

Here are some examples of data conversions (transformations) of data that may be required for this implementation:

- The new system may use different code values. If so, old values must be changed to new values. For example, a "gender field" in the old system may have used the value of "01" for males, but the new system uses "M" for males.
- The field type in the new system might be different. For example, an MS Access database used by the DMV may use three fields for month, day, and year for a date. The new system likely uses a single date field. When moved into a new system, these fields would need to be combined into one field.

A process must be set up to make these changes as the data is migrated (loaded) to the new system.

This ETL process is complicated because the old system will be in use until the time the new system goes online. It's not as simple as throwing a switch because the old systems probably did not have as many controls to prevent mistakes when entering data as the new system will have.

In the example of the date field set up in the old access database as three separate fields, the person who set it up didn't add rules to make sure April didn't have more than 30 days. This means there might be a typo in the system that includes a day 31 for April. If data coming in from this old database violates the business rules of a new system, the new system could reject the entire record associated with that one bad field. This could cause other records associated with that one bad field to be rejected too. Multiply a problem like this by 20 old MS Access databases, hundreds of fields, and millions of records, and you can understand the potential problems that could be encountered.

This issue could be handled in multiple ways. A process could be developed to review data before import and correct errors in the old system, so the records are clean and ready to load on the day the State switches to the new system.

Another way to handle it would be to allow these "bad" records to be loaded into the system and have business rules enforced on new data only and gradually fix the data for current records as renewals are issued. Either way, it's an issue to watch, and it will be interesting to see how a vendor with 17 successful state VS/DS handles this common problem.

Note: Data conversion is within the task list in the VS SOW, so it is definitely on the vendor's radar.

Appendix 5: End Notes

¹ Spaulding, Jake, and Doug Rowe. *Independent Review: Legacy Core Systems Replacement Project for the State of Vermont Agency of Transportation (AOT) Department of Motor Vehicles (DMV)*, 1.0 Executive Summary, December 17, 2021

https://epmo.vermont.gov/sites/emp/files/doc_library/VT_AOT_DMV_IR_Report_FINAL_2.pdf.

² Spaulding, Jake, and Doug Rowe. *Independent Review: Legacy Core Systems Replacement Project for the State of Vermont Agency of Transportation (AOT) Department of Motor Vehicles (DMV)*, 1.0 Executive Summary, December 17, 2021

https://epmo.vermont.gov/sites/emp/files/doc_library/VT_AOT_DMV_IR_Report_FINAL_2.pdf.

³ Spaulding, Jake, and Doug Rowe. *Independent Review: Legacy Core Systems Replacement Project for the State of Vermont Agency of Transportation (AOT) Department of Motor Vehicles (DMV)*, 1.2 Disposition of Independent Review Deliverables, December 17, 2021

https://epmo.vermont.gov/sites/emp/files/doc_library/VT_AOT_DMV_IR_Report_FINAL_2.pdf.

⁴ Spaulding, Jake, and Doug Rowe. *Independent Review: Legacy Core Systems Replacement Project for the State of Vermont Agency of Transportation (AOT) Department of Motor Vehicles (DMV)*, 4.2 Project Goals, December 17, 2021

https://epmo.vermont.gov/sites/emp/files/doc_library/VT_AOT_DMV_IR_Report_FINAL_2.pdf.

⁵ Spaulding, Jake, and Doug Rowe. *Independent Review: Legacy Core Systems Replacement Project for the State of Vermont Agency of Transportation (AOT) Department of Motor Vehicles (DMV)*, 6.0 Technology Architecture and Standards Review, December 17, 2021

https://epmo.vermont.gov/sites/emp/files/doc_library/VT_AOT_DMV_IR_Report_FINAL_2.pdf.

⁶ Spaulding, Jake, and Doug Rowe. *Independent Review: Legacy Core Systems Replacement Project for the State of Vermont Agency of Transportation (AOT) Department of Motor Vehicles (DMV)*, 5.0 Acquisition Cost Assessment, December 17, 2021

https://epmo.vermont.gov/sites/emp/files/doc_library/VT_AOT_DMV_IR_Report_FINAL_2.pdf.

⁷ Spaulding, Jake, and Doug Rowe. *Independent Review: Legacy Core Systems Replacement Project for the State of Vermont Agency of Transportation (AOT) Department of Motor Vehicles (DMV)*, 6.0 Technology Architecture and Standards Review, December 17, 2021

https://epmo.vermont.gov/sites/emp/files/doc_library/VT_AOT_DMV_IR_Report_FINAL_2.pdf